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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,608	11/12/2003	Jorn Macritz	10808/111	5868

48581 7590 02/20/2007

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EXAMINER	
MOFFAT, JONATHAN	
ART UNIT	**PAPER NUMBER**
2863	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/706,608	MAERITZ, JORN	
	Examiner	Art Unit	
	Jonathan Moffat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/26/2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendments to the claims, filed 10/26/2006, are accepted and appreciated. In response the previous objections under 35 USC 101 are withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitefield (US pat 6512985).

With respect to claim 1, Whitefield discloses performing an analysis using values of at least one process parameter of a manufacturing process of a plurality of physical objects (column 1, lines 27-30); determining that at least one physical object of the plurality of physical objects does not satisfy a prescribed selection criterion (column 1, lines 45-49); marking the at least one physical object in such a way that the at least one marked physical object must be sent for a special measurement (column 1, lines 62-64); and removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66).

With respect to claim 2, Whitefield discloses that the physical object is a wafer (column 1, line 21).

With respect to claim 3, Whitefield discloses that the analysis is a statistical analysis (column 1, lines 39-40).

With respect to claim 4, Whitefield discloses that the values of the at least one process parameter are measured when the plurality &physical objects is being manufactured (column 1, lines 11-13).

With respect to claim 5, Whitefield discloses sending the at least one marked physical object for a special measurement (column 1, lines 64-66).

With respect to claim 6, Whitefield discloses that the special measurement is a measurement for checking the quality of the at least one marked physical object (column 1, lines 64-66).

With respect to claim 7, Whitefield discloses continuing the manufacturing process for any of the plurality of physical objects not marked as failing the prescribed selection criterion (see Ref. 22).

With respect to claim 8, Whitefield discloses that the selection criterion is a quality characteristic of the manufacturing process (column 1, lines 16-20).

With respect to claim 9, Whitefield discloses that the selection criterion is not satisfied if a value & the at least one process parameter goes above or below a prescribed limit value (column 1, lines 50-55).

With respect to claim 10, Whitefield discloses performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-

64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

With respect to claim 11, Whitefield discloses performing analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

With respect to 12, Whitefield discloses performing analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

Whitefield et al. does not discuss performing the process without human intervention.

It would have been obvious to one skilled in the art at the time of the invention to automate the method. Merely using a computer to automate a known process does not by itself impart nonobviousness to the invention. See In re Venner, 262 F.2d 91, 95, 120 USPQ 193, 194

(CCPA 1958). See also Dann v. Johnston, 425 U.S. 219, 227-30, 189 USPQ 257, 261 (1976). See IV [PEP 2106.

2.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitefield in view of Takanabe (US pat 6606574).

With respect to claim 13, Whitefield discloses performing an analysis using values of at least one process parameter of a manufacturing process of a plurality of physical objects (column 1, lines 27-30); determining that at least one physical object of the plurality of physical objects does not satisfy a prescribed selection criterion (column 1, lines 45-49); marking the at least one physical object in such a way that the at least one marked physical object must be sent for a special measurement (column 1, lines 62-64); and removing the at least one marked physical object from the manufacturing process (column 1, lines 64-66).

With respect to claim 14, Whitefield discloses performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object whenl as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

With respect to claim 15, Whitefield discloses performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the

at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

With respect to claim 16, Whitefield discloses performing an analysis using values of at least one process parameter of the manufacturing process of the plurality of physical objects (column 1, lines 27-30); marking at least one physical object when, as a result of the analysis, the at least one physical object does not satisfy a prescribed selection criterion (column 1, lines 62-64); removing the at least one marked physical object form the manufacturing process (column 1, lines 64-66); and sending the at least one marked physical object for special treatments (column 1, lines 64-66).

With respect to claims 13-16, Whitefield fails to disclose preventing values associated with the at least one marked physical object from affecting an average product quality of the plurality of physical objects.

Takanabe teaches, with respect to claims 13-16, performing quality control analysis early in production to take measures to assure that the average quality of a product does not fall below a limit (column 8, lines 9-20). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Whitefield et al. with the teachings of Takanabe to remove products that would affect the average product quality. The motivation for making this combination would be to have a higher output by not declaring entire lots defective, but by removing defective wafers earlier (Takanabe, column 8, lines 1-20).

Response to Arguments

Applicant's arguments filed 10/26/2006, have been fully considered but they are not persuasive.

As stated in the previous office action, the use of a computer or other machinery to automate a known process does not by itself impart nonobviousness. The applicant has highlighted this one deficiency in the reference Whitefield, implying that it is the only distinction and therefore is by itself what applicant believes is novel in the present claims. The motivation for process automation is well known and would have been obvious to one of ordinary skill in the art. Reasons for such modification include, but are not limited to, greater reliability, lower costs, and increased operation time (since computers don't need rest). As further evidence of the obviousness (and its widespread use in the relevant arts) the examiner adds that the other prior art previously cited in this case (Bone and Takanabe) both incorporate automation for wafer inspection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Moffat whose telephone number is (571) 272-2255. The examiner can normally be reached on Mon-Fri, from 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/14/07

JM

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